



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/059,077	04/09/1998	GREGORY E. JOHNSTON		8143
7590	04/07/2004		EXAMINER	
GREGORY E JOHNSTON			NGUYEN, LUONG TRUNG	
1528 MONTEVAL PLACE				
SAN JOSE, CA 95120			ART UNIT	PAPER NUMBER
			2612	
			DATE MAILED: 04/07/2004	
			14	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/059,077	JOHNSTON ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	LUONG T NGUYEN	2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10 December 2003.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-25 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-25 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

Art Unit: 2612

**DETAILED ACTION**

1. In view of the decision of the Board of Patent Appeals and Interferences rendered on 12/10/2003, PROSECUTION IS HEREBY REOPENED. A non-final Office Action set forth below.

*Claim Objections*

2. Claims 1-25 are objected to because of the following informalities:

Claim 1 (line 8), "said captured images" should be changed to --said captured mobile images--.

Claim 2 (line 2), said full rotation" should be changed to --a full rotation--.

Claim 11 (line 2), "said slip clutch" should be changed to --said slip clutches--.

Claim 17 (line 2), "said camera enclosure" should be changed to --a camera enclosure--.

Claim 18 (line 2), "said display and control system" should be changed to --said display-control box--.

Claim 19 (line 2), "said display and control system" should be changed to --said display-control box--.

Claim 19 (line 3), "said single hand" should be changed to --a single hand--.

Claim 25 (lines 4), "said images" should be changed to --said captured mobile images--.

Claim 25 (line 5), "said camera position" should be changed to --a camera position--.

Claim 25 (lines 6), "said images" should be changed to --said captured mobile images--.

Claims 2-25 are objected as being dependent on claim 1.

Art Unit: 2612

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 13-14, 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clendenin et al. (US 4,386,848) in view of Lucas et al. (US 5,111,289).

Regarding claim 1, Clendenin et al. discloses a mobile pan and tilt camera and display-control apparatus comprising a fully rotatable camera attached to a mount assembly that is mounted to a vehicle for capturing mobile images (Sight assembly 10, which contains television camera, Figures 1-3, Column 5, Lines 49-60); a display-control box (combination of display 60, control panel 50, joystick 52, Figure 10, Column 5, Lines 50-65) having an image display screen (display 60, Figure 10, Column 5, Lines 50-67) and control buttons (control panel 50, joystick 52, Figure 10, Column 5, Lines 50-65) for controlling said camera and its movement (the operator, through the use of control panel 50, may control the sight assembly 10 (which contains television camera) manually to initiate tracking or to place sight assembly 10 into automatic tracking, Column 5, Lines 55-65; this indicates that the movement of the television camera is controlled), said display-control box being attached to an adjustable mount in said vehicle within an operator's view and reach (Column 5, Lines 55-60).

Clendenin et al. fail to specifically disclose an image capture box for receiving said captured images. However, Lucas et al. discloses a vehicular-based surveillance system, which includes a video recorder 40 to record images captured by the video camera 22 (Figures 1-2, Column 1, Lines 50-60, Column 3, Lines 10-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al. by the teaching of Lucas et al. in order to provide own record of events of a person for private purposes, such as for providing proof of insurance claims (Column 1, Lines 24-27).

Regarding claim 13, Clendenin et al. discloses a Field of View (FOV) stabilized camera which provides an electronic compensation to overcome mechanical gear backlash and vibration (Figure 11, Column 12, Line 42 - Column 13, Line 21).

Regarding claim 14, Clendenin et al. discloses said camera may be mounted at any angle with respect to gravity (Figures 2-3).

Regarding claim 18, Clendenin et al. discloses said display and control system have a set of control buttons positioned to be operated with a single hand (Figure 10, Column 5, Lines 55-60).

Regarding claim 19, Clendenin et al. discloses said display and control system have a viewing angle adjustment lever positioned to be operated with said single hand (Figure 10, Column 5, Lines 55-60).

5. Claims 2, 5-6, 22, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clendenin et al. (US 4,386,848) in view of Lucas et al. (US 5,111,289) further in view of Klapper et al. (US 5,729,016).

Regarding claim 2, Clendenin et al. and Lucas et al. fail to specifically disclose a full rotation is achieved by mounting said camera to a tilting mechanism mounted on a panning mechanism. However, Klapper et al. discloses camera pointing mechanism 500, which includes tilt gimbal 502, which is mounted on pan gimbal 504 (Figures 2-3, Column 4, Lines 52-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al. and Lucas et al. by the teaching of Klapper et al. in order to allow camera to see the object at a different height. Due to the camera can pan or tilt at a different height; the camera can achieve a full rotation.

Regarding claim 5, Klapper et al. discloses a water seal attached to said tilting mechanism (water-resistant case, Column 13, Lines 65-67).

Regarding claim 6, Klapper et al. discloses the mount assembly is adapted to engage the roof-rack of a vehicle (Figure 1).

Regarding claim 10, Klapper discloses a singular support for both said panning mechanism and said tilting mechanism and separate drive gears (tilt drive gear 522, pan drive motor gear 544, Figure 3, Column 5, Lines 12-15, Lines 45-46) and slip clutches (slip ring and brush

assembly 536, Figures 3, 6, Column 5, Lines 30-39) for both said panning mechanism and said tilting mechanism.

Regarding claim 22, Klapper et al. discloses said mount assembly includes an adapter plate to mate to a light bar used on emergency and patrol guard vehicles (Figures 1, 2, Column 1, Lines 25-27).

Regarding claim 24, Klapper et al. discloses said mount assembly includes an adapter plate for ship-board attachment (Figure 15).

6. Claims 3-4, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clendenin et al. (US 4,386,848) in view of Lucas et al. (US 5,111,289) further in view of Paddock et al. (US 5,737,657).

Regarding claim 3, Clendenin et al. and Lucas et al. fail to specifically disclose the mount assembly incorporates a quick disconnect mechanism. However, Paddock et al. discloses an adjustable platform includes a platform, a mounting plate, to which a camera is attached, and a quick release mechanism (see Abstract, Column 7, Lines 27-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al. and Lucas et al. by the teaching of Paddock et al. in order to allow the user to save time when attach or detach the mount assembly to or from a vehicle.

Art Unit: 2612

Regarding claim 4, Paddock et al. discloses a double locking mechanism on said mount assembly where one mechanism is a security fastener (quick release mechanism includes two pins 76 and locking screw 77 (security fastener), Figures 6-7, Column 7, Lines 26-45).

Regarding claim 8, Clendenin et al. and Lucas et al. fail to specifically disclose a ball-plunger for self-locking said mount assembly. However, Paddock et al. discloses an adjustable platform includes a platform, a mounting plate, to which a camera is attached, and a quick release mechanism 70, which includes a ball-plunger 80 (Figures 6-7, Column 7, Lines 27-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al. and Lucas et al. by the teaching of Paddock et al. in order to lock the mount assembly.

Regarding claim 9, Paddock et al. discloses a security fastener as secondary and operator activated mechanical locking mechanism for said mount assembly (quick release mechanism includes two pins 76 and locking screw 77 (security fastener), Figures 6-7, Column 7, Lines 26-45).

7. Claims 7, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clendenin et al. (US 4,386,848) in view of Lucas et al. (US 5,111,289) and Klapper et al. (US 5,729,016) further in view of Sclater (US 5,365,687).

Regarding claims 7 and 21, Clendenin et al., Lucas and Klapper et al. fail to specifically disclose said mount assembly is adapted to engage a THULE brand roof rack system or mates to

a YAKIMA brand roof rack system. However, Sclater discloses a vehicular roof-top collapsible display frame assembly for mobile advertising, which uses the well-known “Thule” or “Yakima” trademarked roof-top carriers (Column 3, Lines 45-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al., Lucas et al. and by the teaching of Paddock et al. in order to allow the user can attach the mount assembly to different type of vehicle.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clendenin et al. (US 4,386,848) in view of Lucas et al. (US 5,111,289) and Klapper et al. (US 5,729,016) further in view of Kurian (US 5,762,556).

Regarding claim 21, Clendenin et al., Lucas et al. and Kappler et al. fail to specifically disclose said slip clutch comprises a rotationally free gear; a support housing for gear; a friction pad co-aligned to said gear between said gear and said support housing; a wave washer to apply a pressure against said rotationally free gear and said support housing of sufficient force to enable a motor to drive said gear and said support housing to a point where said support housing stops rotating and said rotationally free gear breaks friction of said friction pad while said motor continues to drive without overheating. However, Kurian discloses an adjustable free motion friction clutch, which has a free rotation control, a friction disc 16, washer 24, Figures 1-2, 5, Column 2, Lines 30-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al., Lucas et al. and Klapper et al. by the teaching of Kurian in order to provide an adjustable free motion friction clutch (Column 1, Lines 25-28).

9. Claims 12, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clendenin et al. (US 4,386,848) in view of Lucas et al. (US 5,111,289) further in view of Sergeant et al. (US 5,107,286) and Kennedy et al. (US 4,695,881).

Regarding claim 12, Clendenin et al. and Lucas et al. fail to specifically disclose a camera enclosure is sealed with an o-ring for moisture blocking. However, Sergeant et al. discloses a sealed camera housing 10, which includes “O” ring 22 (Figures 1-2, Column 3, Lines 18-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al. and Lucas et al. by the teaching of Sergeant et al. in order to protect a camera from damage by the environment within which it is placed (Column 1, Lines 8-10).

Clendenin et al., Lucas et al. and Sergeant et al. fail to specifically disclose a camera enclosure with bezel opening that is threaded to accept optical filters. However, Kennedy et al. discloses a camera housing, which has an opening to accept optical filter 36 (Figure 2, Column 5, Lines 23-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al., Lucas et al. and Sergeant et al. by the teaching of Kennedy et al. in order to allow proper focusing without the use of a spacer (Column 5, Lines 25-26).

Regarding claim16, Kennedy et al. discloses the camera enclosure is adapted to act as an additional heat sink (Column 5, Lines 4-9).

Art Unit: 2612

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clendenin et al. (US 4,386,848) in view of Lucas (US 5,111,289) further in view of Baumeister (US 4,739,409).

Regarding claim 15, Clendenin et al. and Lucas et al. fail to specifically disclose a bimetal heat sink for camera power supply temperature control. However, Baumeister discloses heat sink 14 support cooler 10 for cooling imager chip 8 (Figure 2, Column 3, Lines 55-63). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al. and Lucas et al. by the teaching of Baumeister in order to keep the camera from overheating.

11. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clendenin et al. (US 4,386,848) in view of Lucas (US 5,111,289) further in view of Balkwill et al. (US 4,408,695).

Regarding claim 17, Clendenin et al. and Lucas et al. fail to specifically disclose said camera enclosure incorporates a one-way moisture passage plug with flexible and sealed passage for wires. However, Balkwill et al. discloses an electrical box, which prevents moisture from entering the box. The electrical box also includes a plug and opening that receives a wire, which is sealed and resists moisture passage (Column 1, Lines 35-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al. and Lucas et al. by the teaching of Balkwill et al. in order to prevent moisture from entering the camera housing. This prevents the damage of the camera.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clendenin et al. (US 4,386,848) in view of Lucas (US 5,111,289) further in view of Tovi (US 4,225,881).

Regarding claim 20, Clendenin et al. and Lucas fail to specifically disclose an optically clear or tinted sphere enclosing said camera. However, Tovi discloses a transparent globe 12, which contains camera 30 (Figure 2, Column 4, Line 63 – Column 5, Line 29). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al. and Lucas et al. by the teaching of Tovi in order to

13. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clendenin et al. (US 4,386,848) in view of Lucas et al. (US 5,111,289) and Klapper et al. (US 5,729,016) further in view of Yang (US 4,578,665).

Regarding claim 23, Clendenin et al., Lucas and Klapper et al. fail to specifically disclose said mount assembly is adaptable to a rail road locomotive attachment. However, Yang discloses a video surveillance train car, which includes camera 138 (Figure 17, Column 8, Lines 1-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the mount assembly adaptable to a train car in order to attach the camera to the train car.

14. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clendenin et al. (US 4,386,848) in view of Lucas et al. (US 5,111,289) further in view of Kujirada (JP 10-3-4339).

Art Unit: 2612

Regarding claim 25, Clendenin et al. discloses a process for viewing a scene with mobile pan or tilt camera of claim 1 comprising the steps of mounting said camera to a vehicle for capturing mobile images (Sight assembly 10, which contains television camera, Figures 1-3, Column 5, Lines 49-60); displaying said images on an image display screen (display 60, Figure 10, Column 5, Lines 50-67); controlling said camera position from within said vehicle (control panel 50 is located at the operator's location, for example, in the cabin of a helicopter, Column 5, Lines 55-58).

Clendenin et al. fail to specifically disclose capturing said images in an image capture box for storage. However, Lucas et al. discloses a vehicular-based surveillance system, which includes a video recorder 40 to record images captured by the video camera 22 (Figures 1-2, Column 1, Lines 50-60, Column 3, Lines 10-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Clendenin et al. by the teaching of Lucas et al. in order to provide own record of events of a person for private purposes, such as for providing proof of insurance claims (Column 1, Lines 24-27).

Clendenin et al. and Lucas et al. fail to specifically disclose transmission of said captured mobile images; and transmitting said captured mobile images by radio frequency transmission to a data storage server for further processing; and providing said captured mobile images on internet server for official or consumer access. However, Kujirada discloses a vehicle video providing system and virtual vehicle traveling system, in which video data from each vehicle 3-5 are transmitted through a radio communication network and an internet 1 to a video managing computer 2 (see Abstract, Figure 1). Therefore, it would have been obvious to one of ordinary

Art Unit: 2612

skill in the art at the time the invention was made to modify the device in Clendenin et al. and Lucas et al. by the teaching of Kujirada in order to provide video image to a remote location.

***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T NGUYEN whose telephone number is (703) 308-9297. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN LN  
4/2/04

*Wendy R. Garber*  
WENDY R. GARBER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

*Allen Macdonald*  
ALLEN R. MACDONALD  
DIRECTOR  
TECHNOLOGY CENTER 2600